# Defense Fuel Support Point

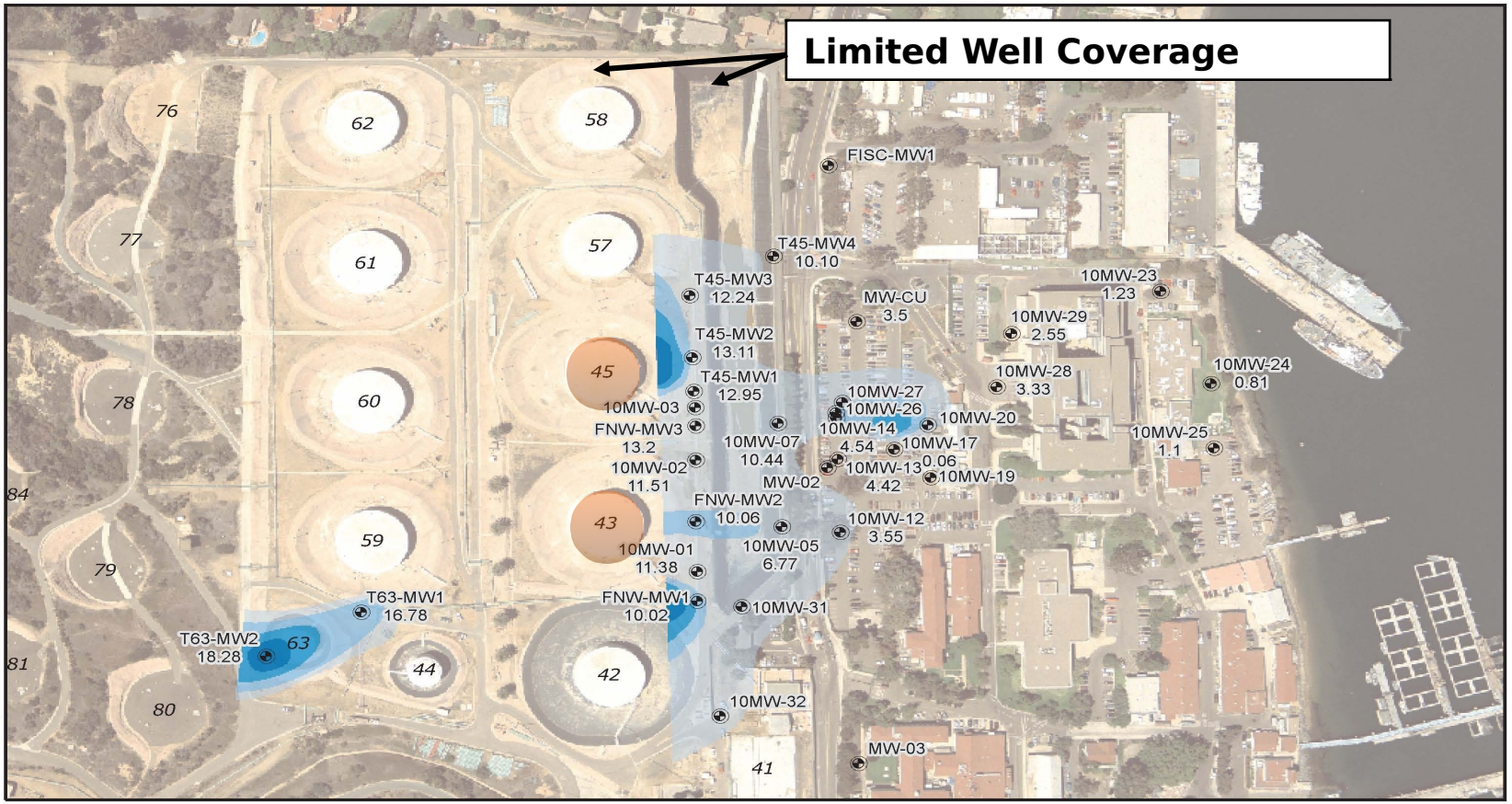
# Naval Base Point Loma
# San Diego, CA

CAPT Mark Patton, USN

Commanding Officer, Naval Base Point Loma


**6 July 2006 – Presentation to the Point Loma's Town Hall Meeting**

# Underground Fuel Plume Early 2005




| DRAWING NUMBER | APPROVED BY | CHECKED BY | DRAWN BY | OFFICE |
|---|---|---|---|---|
| 115538-07050000 | | | 01/19/2006 | Scottsdale |
| | | | M.Barbour | |

Legend

Monitoring Well

Product Thickness

- 0' - 2'
- 2' - 4'
- 4' - 6'
- > 6'

N

0 100 200 300 400

Feet

Shaw Shaw Environmental, Inc.

1230 Columbia Street
San Diego, CA 92101

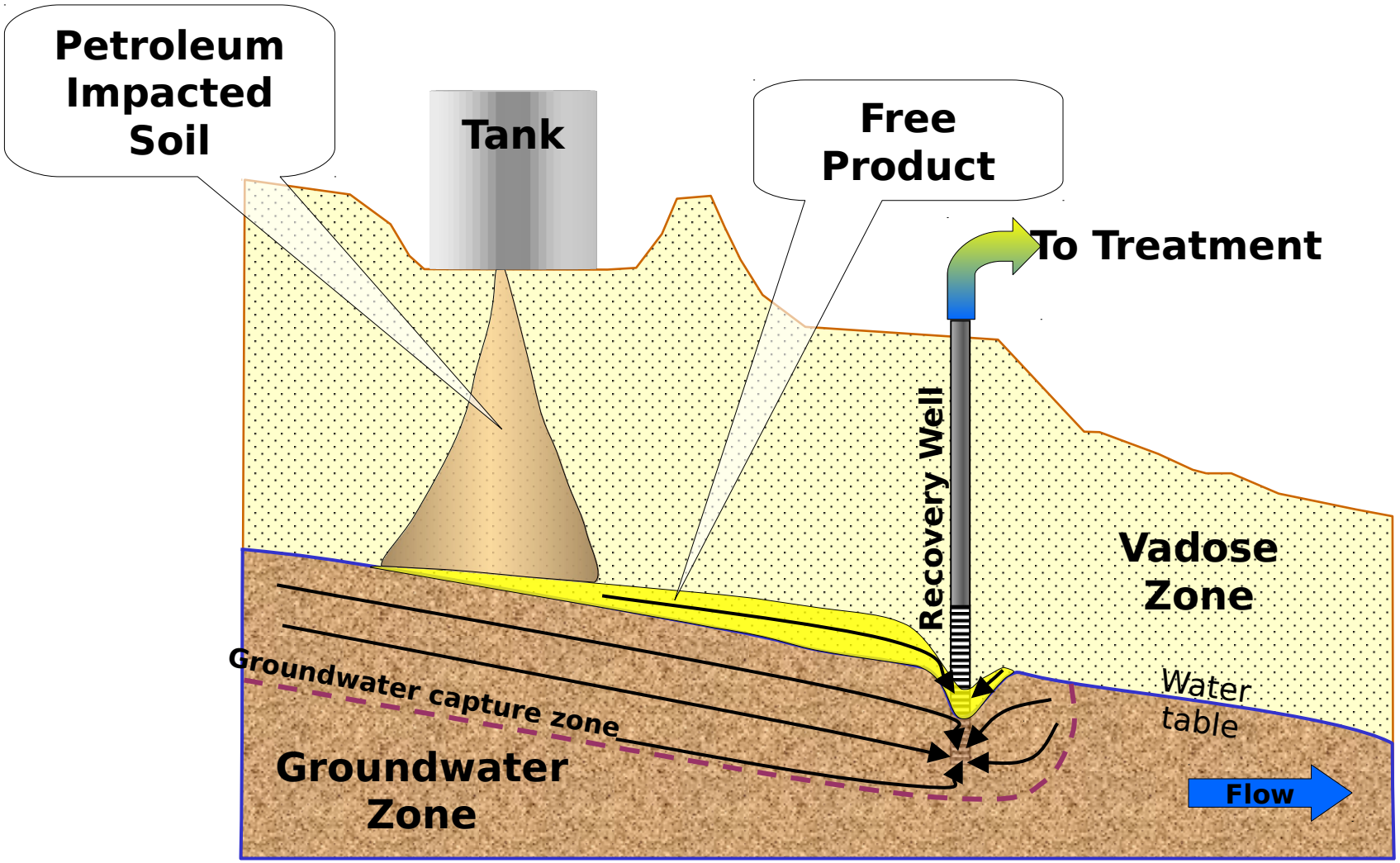
CLIENT: Navy Public Works Center

LOCATION: FISC Fuel Farm Point Loma
San Diego, CA

FIGURE 6

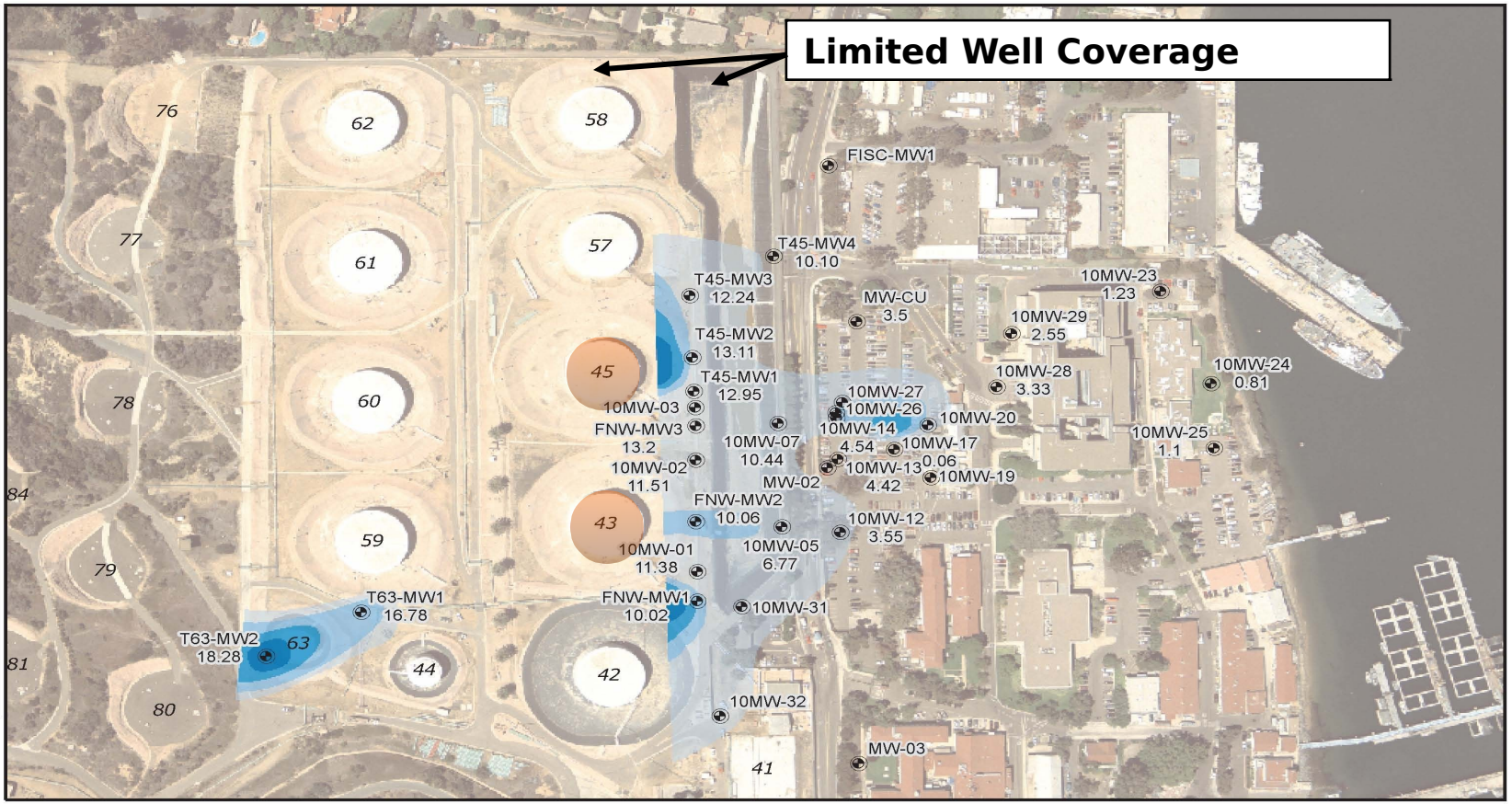
ISOPACH MAP OF PHASE-SEPARATED HYDROCARBONS
MARCH 2005

# Underground Fuel Recovery




Not to scale

# Underground Fuel Plume Early 2005

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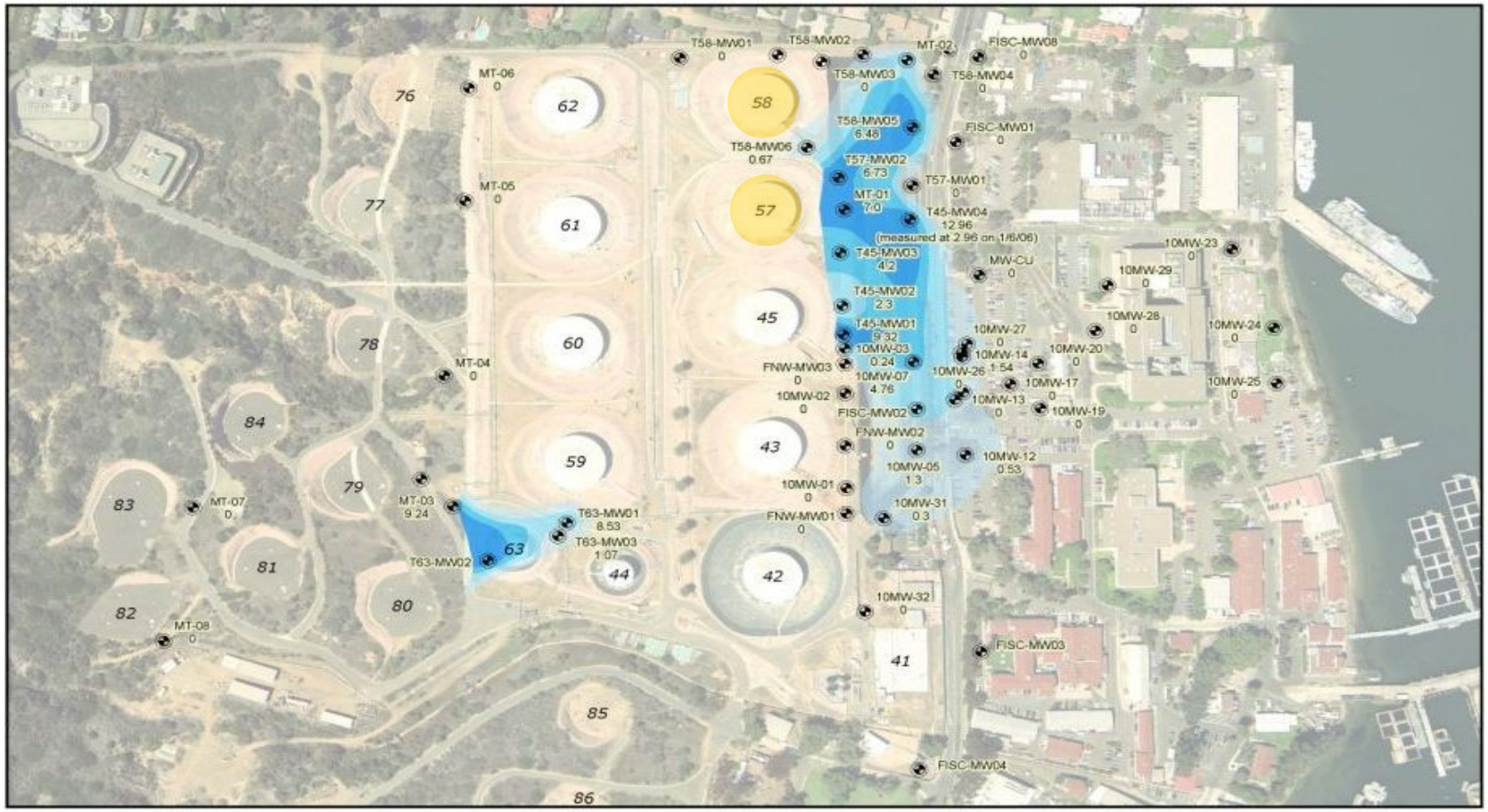
MARCH 2005

# Underground Fuel Plume December 2005



Legend

Monitoring Well

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- 4' - 6'
- > 6'

N

0 125 250 375 500

Feet

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**ISOPACH MAP OF PHASE-SEPARATED HYDROCARBONS DECEMBER 2005**

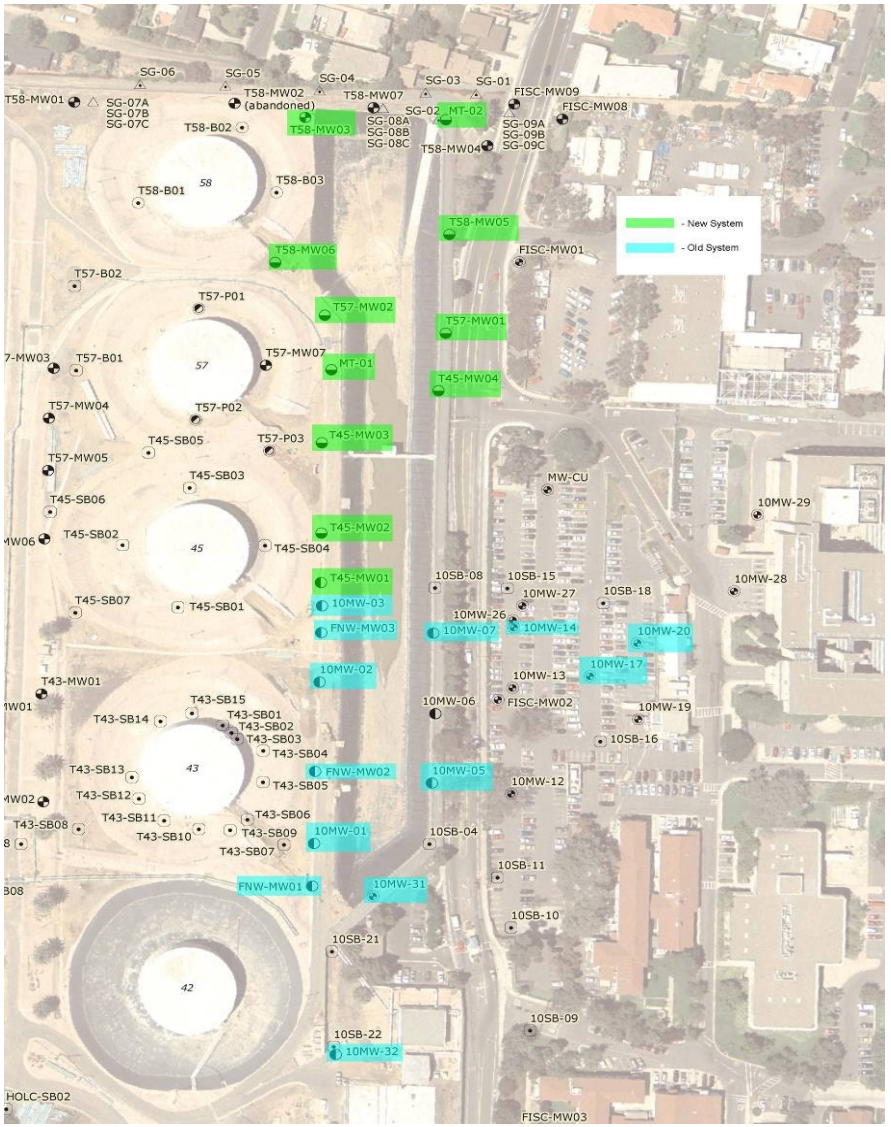
# Underground Fuel Plume Current Estimate

# Tanks 57 & 58

- Jan 06, tanks removed from service due to being adjacent to new plume areas
- Both tanks passed numerous integrity tests

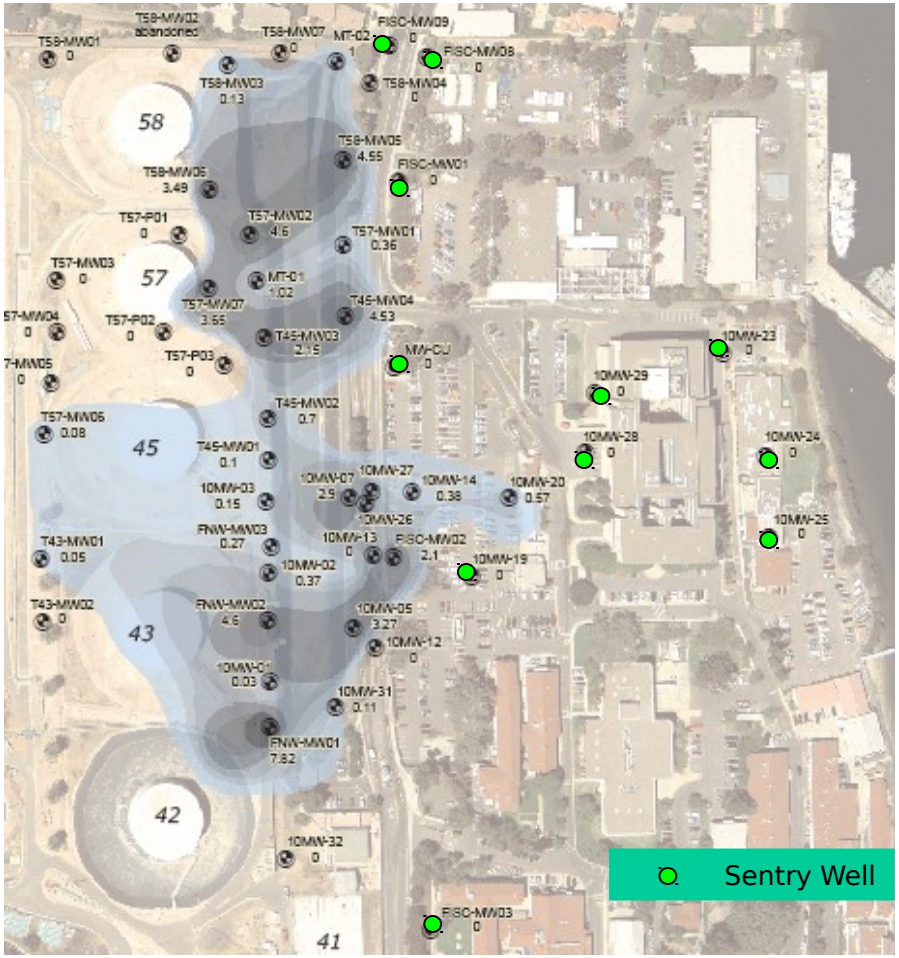
# Fuel Plume Recovery System

- 11 new recovery wells on northern area of the plume
- Installed above ground collection tank and transfer system



# Sentry Wells and Plume Monitoring

- Continued close monitoring of Sentry Wells for movement
- Continue to monitor for any new sources of fuel product



# Recovery / Monitoring Well Installation

- Installed 12 additional monitoring wells around the plume perimeter
- Multiple additional borings Tanks 76, 77, 78, 79, 82, 83
- Installed shallow and multiple-depth soil-vapor probes

# Northern Boundary Monitoring

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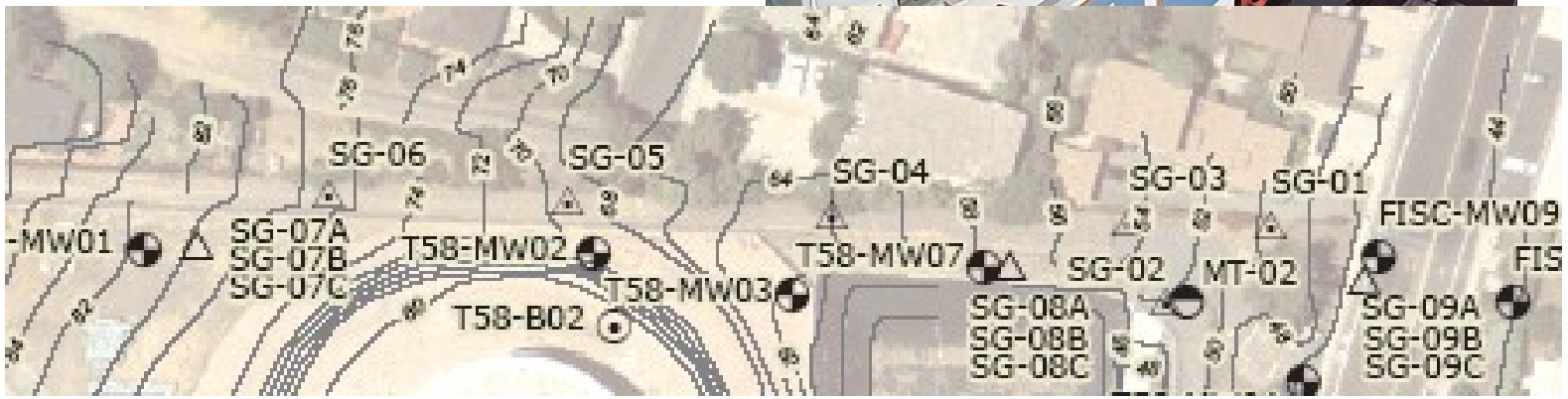
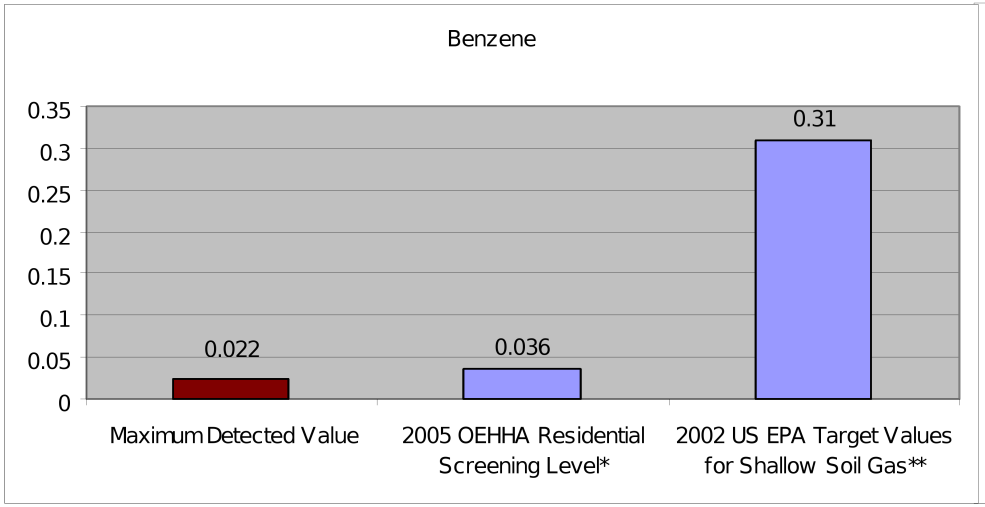
**SOIL VAPOR MONITORING POINTS, OBSERVATION, AND RECOVERY WELLS**

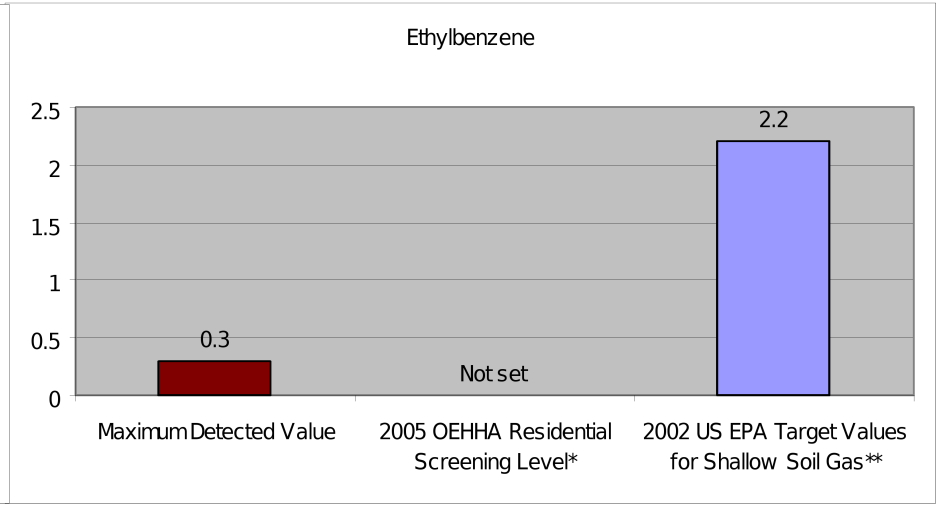
# Soil Vapor Monitoring

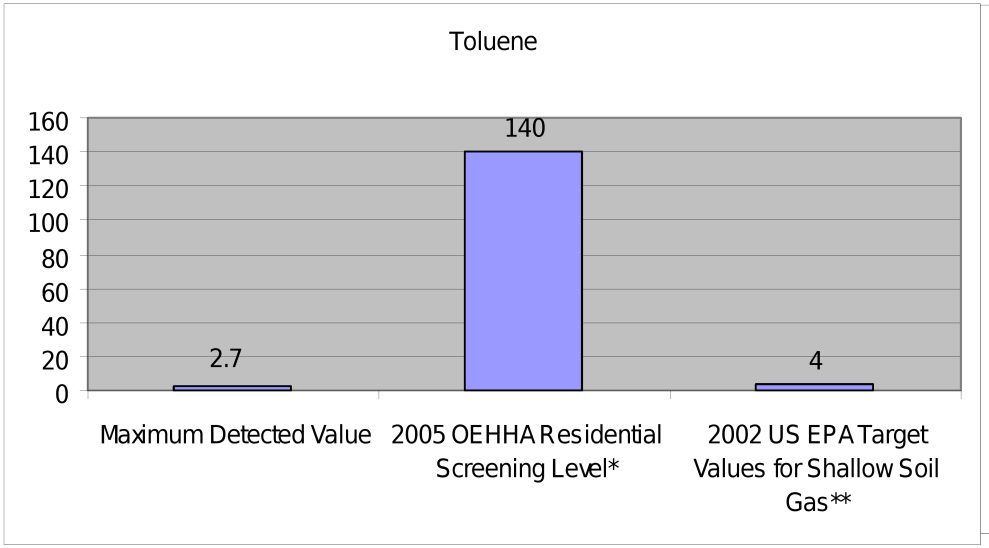
- Soil gas is measured from 15 sampling points on the northern boundary of Naval Base Point Loma

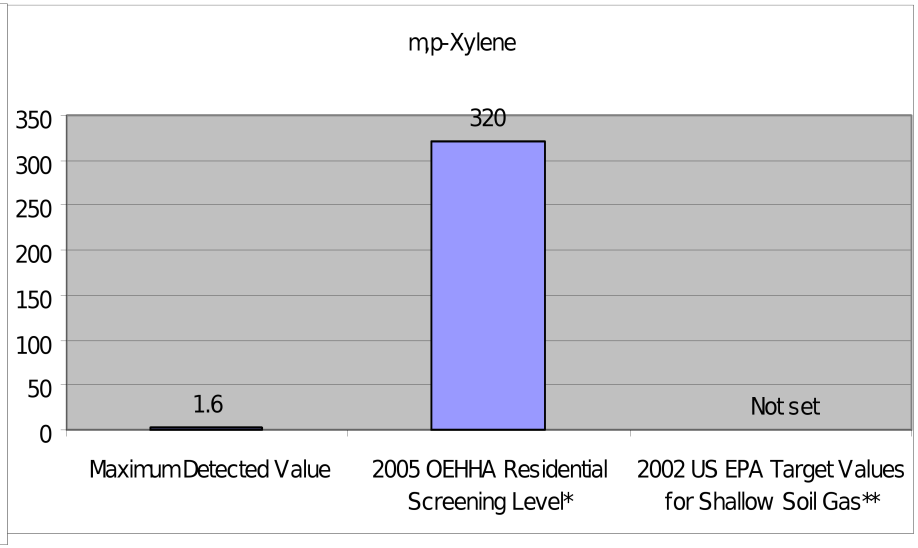


# Summary of Soil Gas sampling

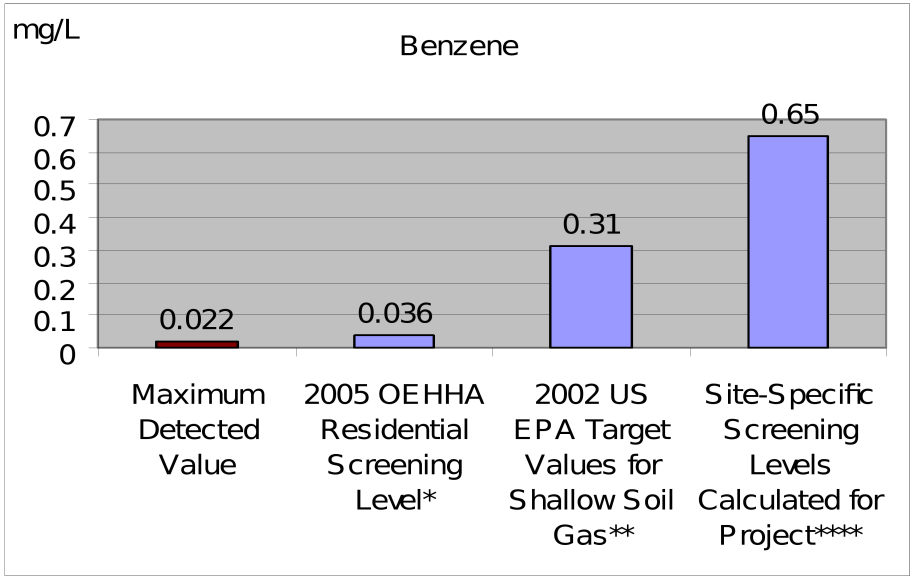


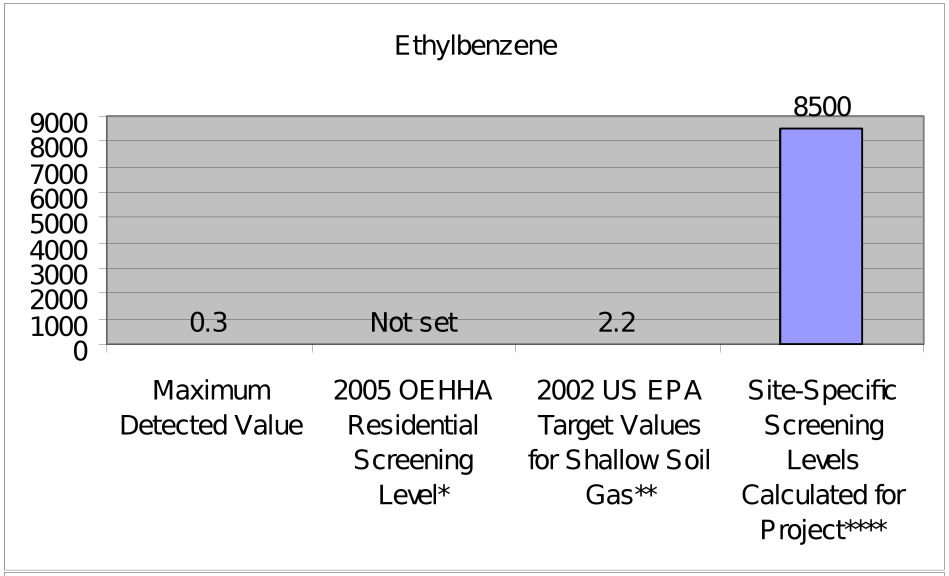



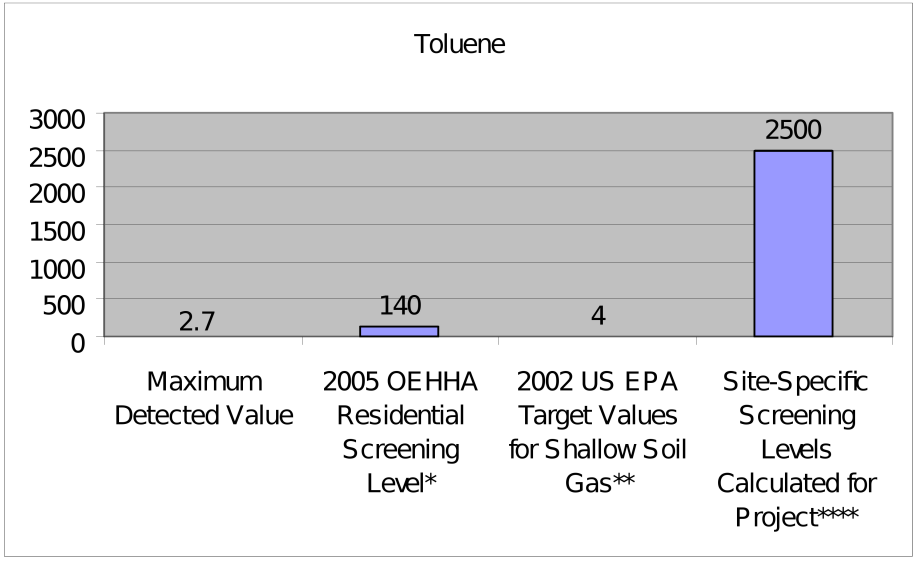



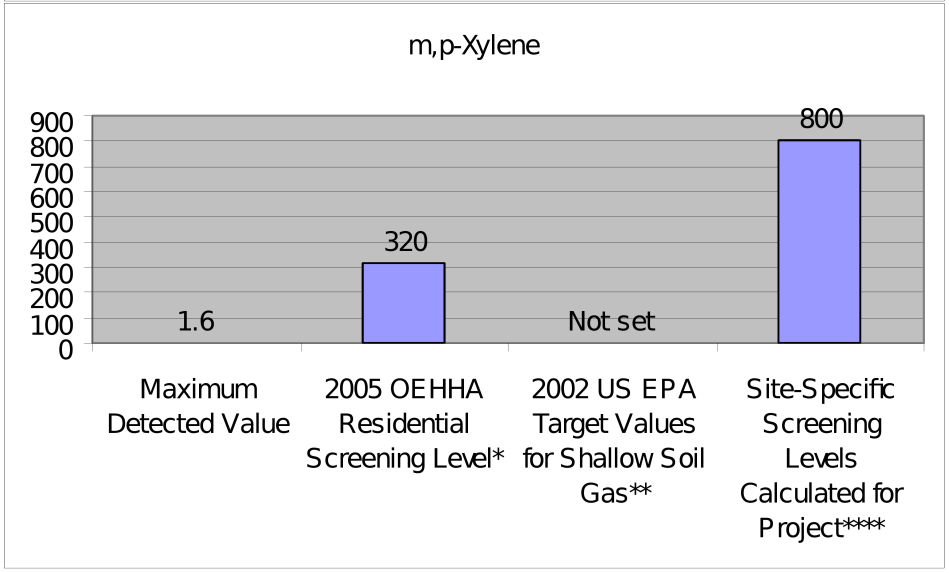



# Summary of Soil Gas sampling (cont.)

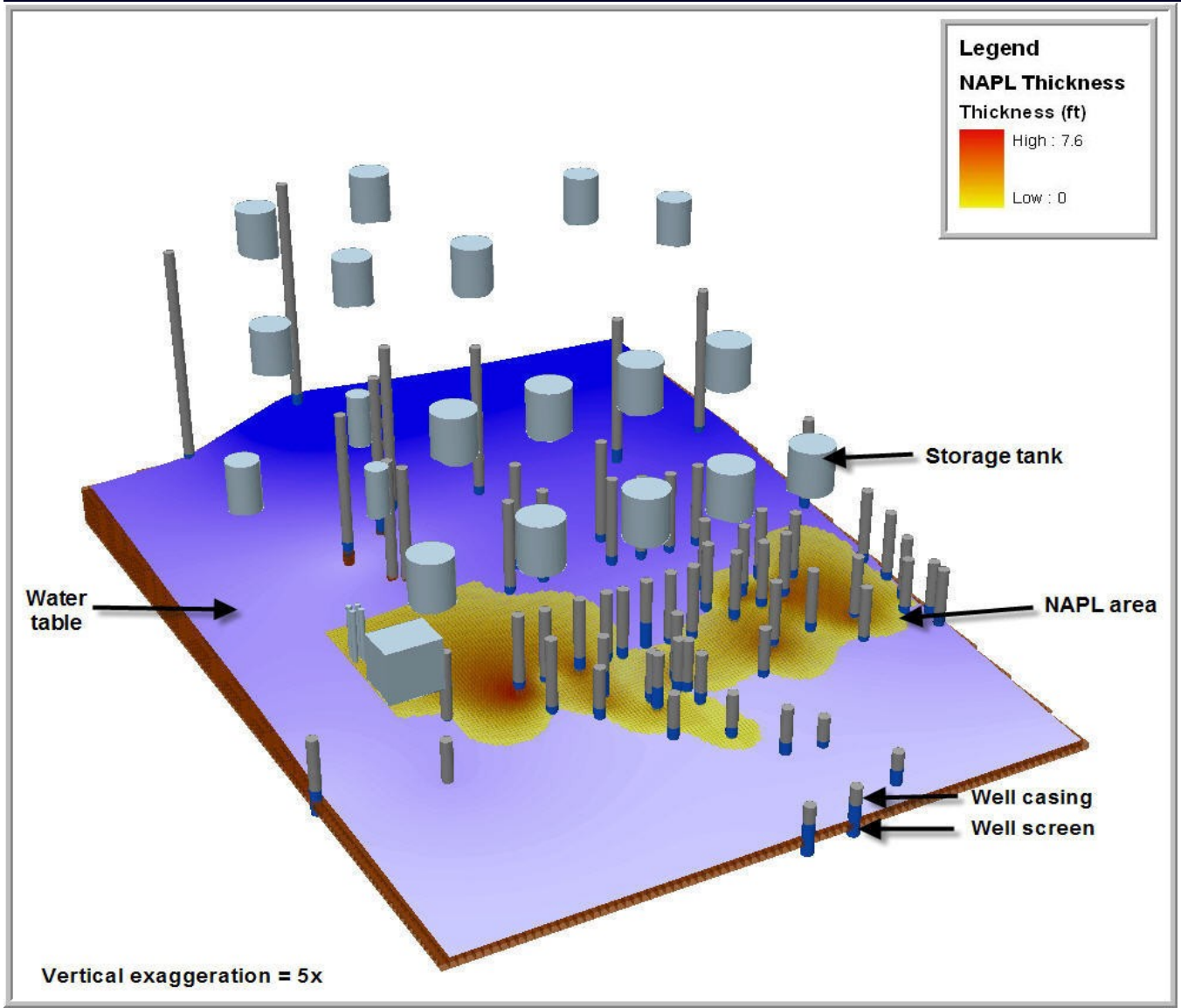


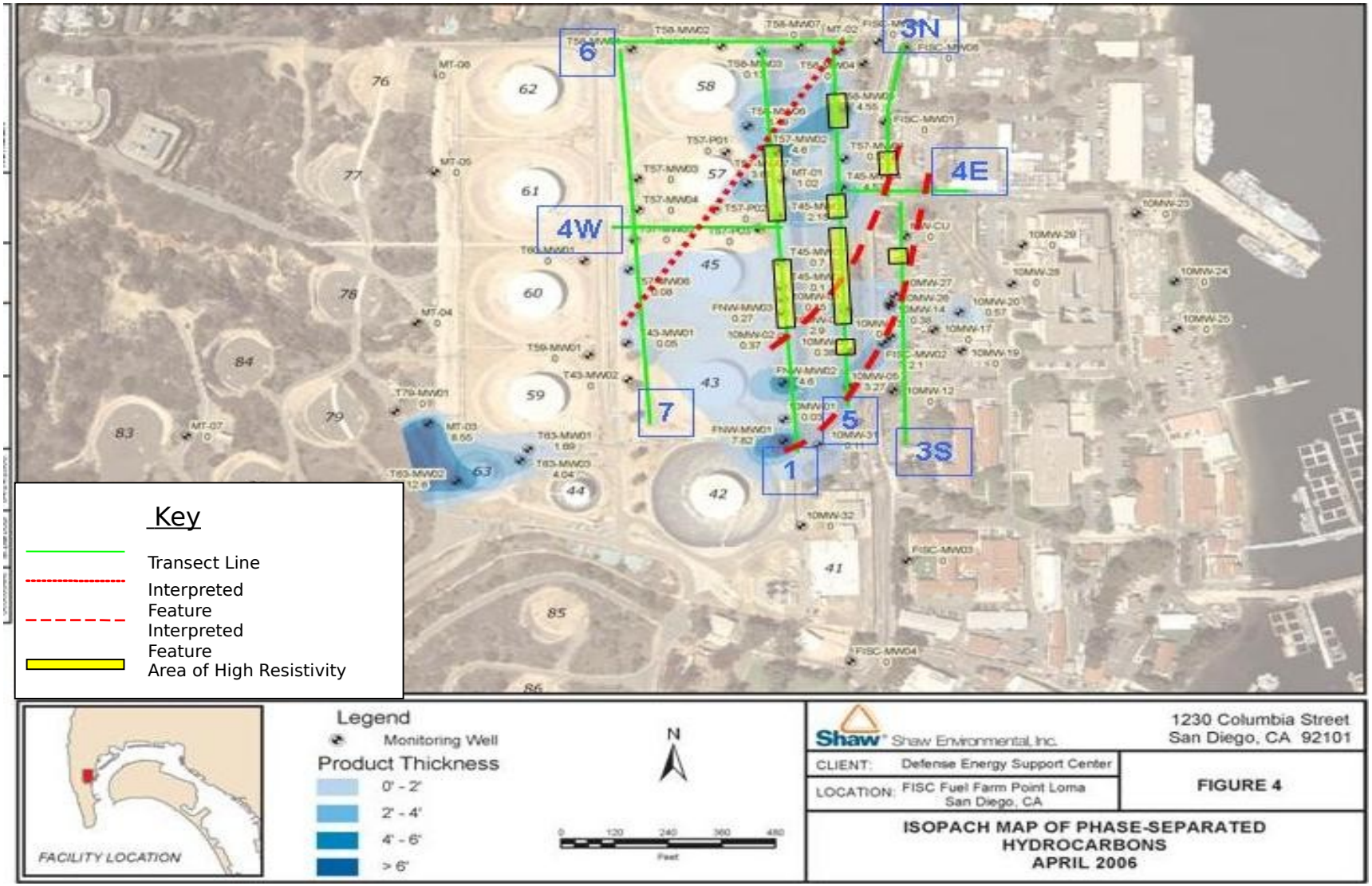



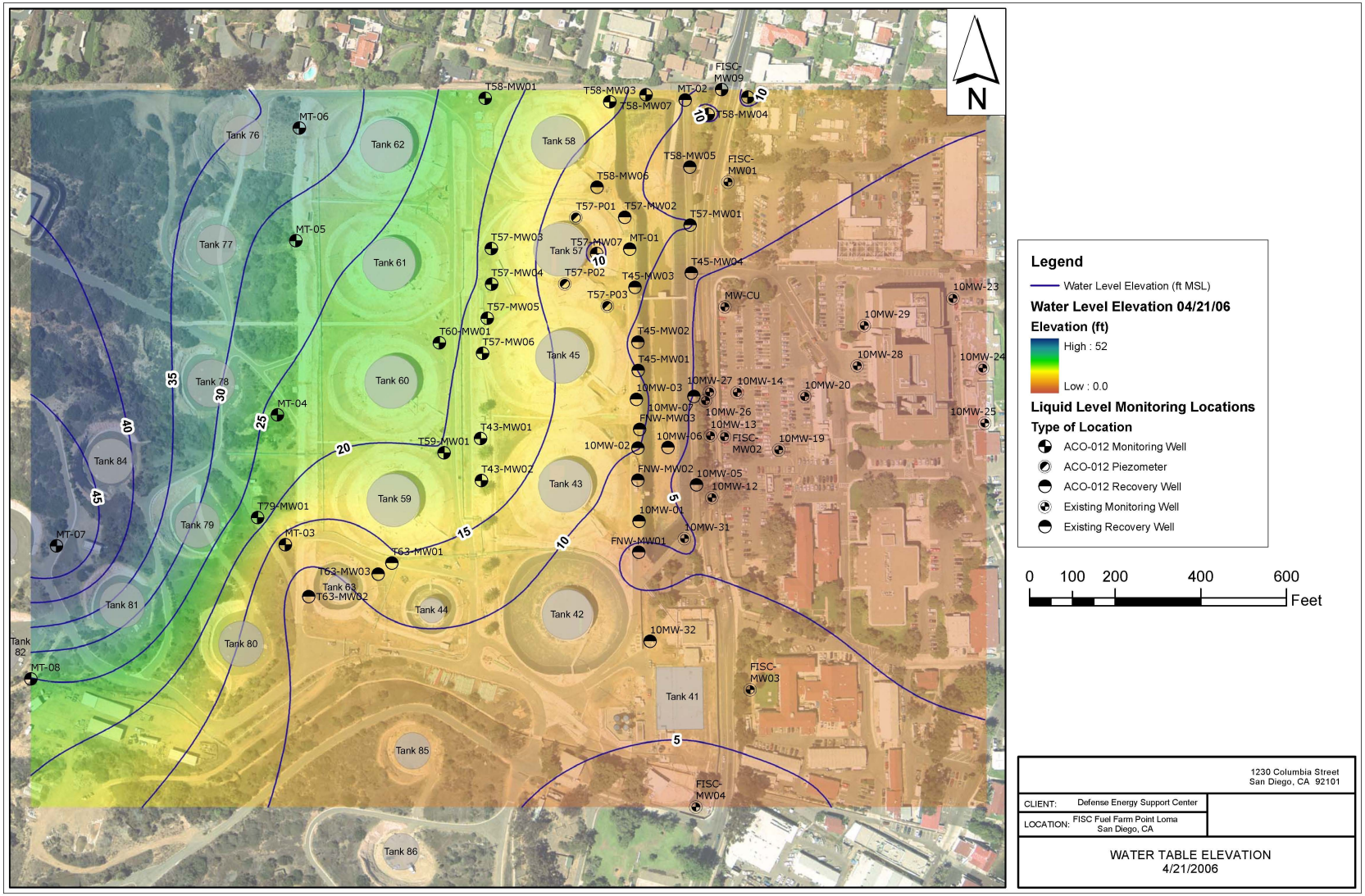
# Site Modeling



# Geophysical Analysis



# Site Modeling - Groundwater

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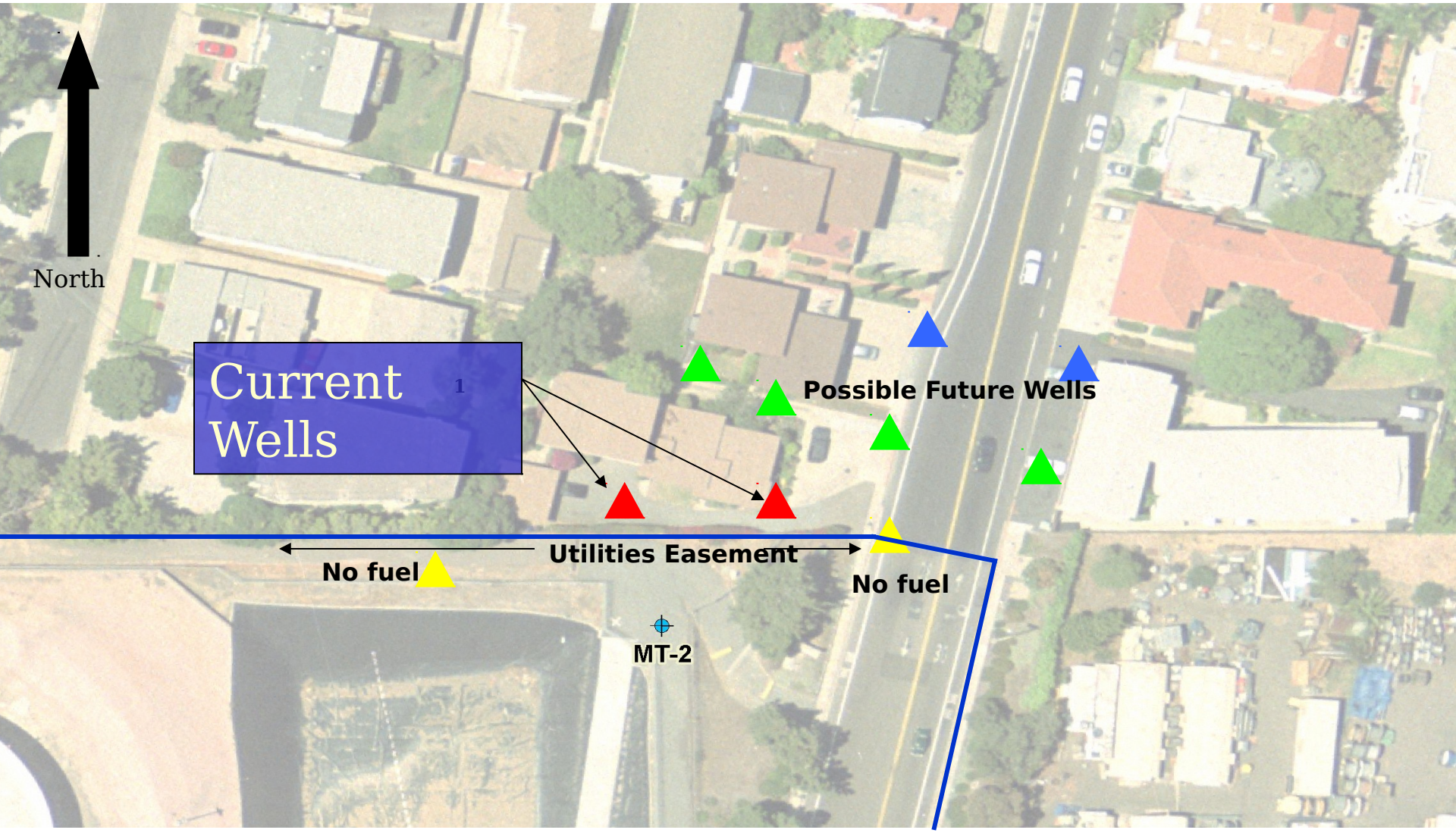
WATER TABLE ELEVATION
4/21/2006

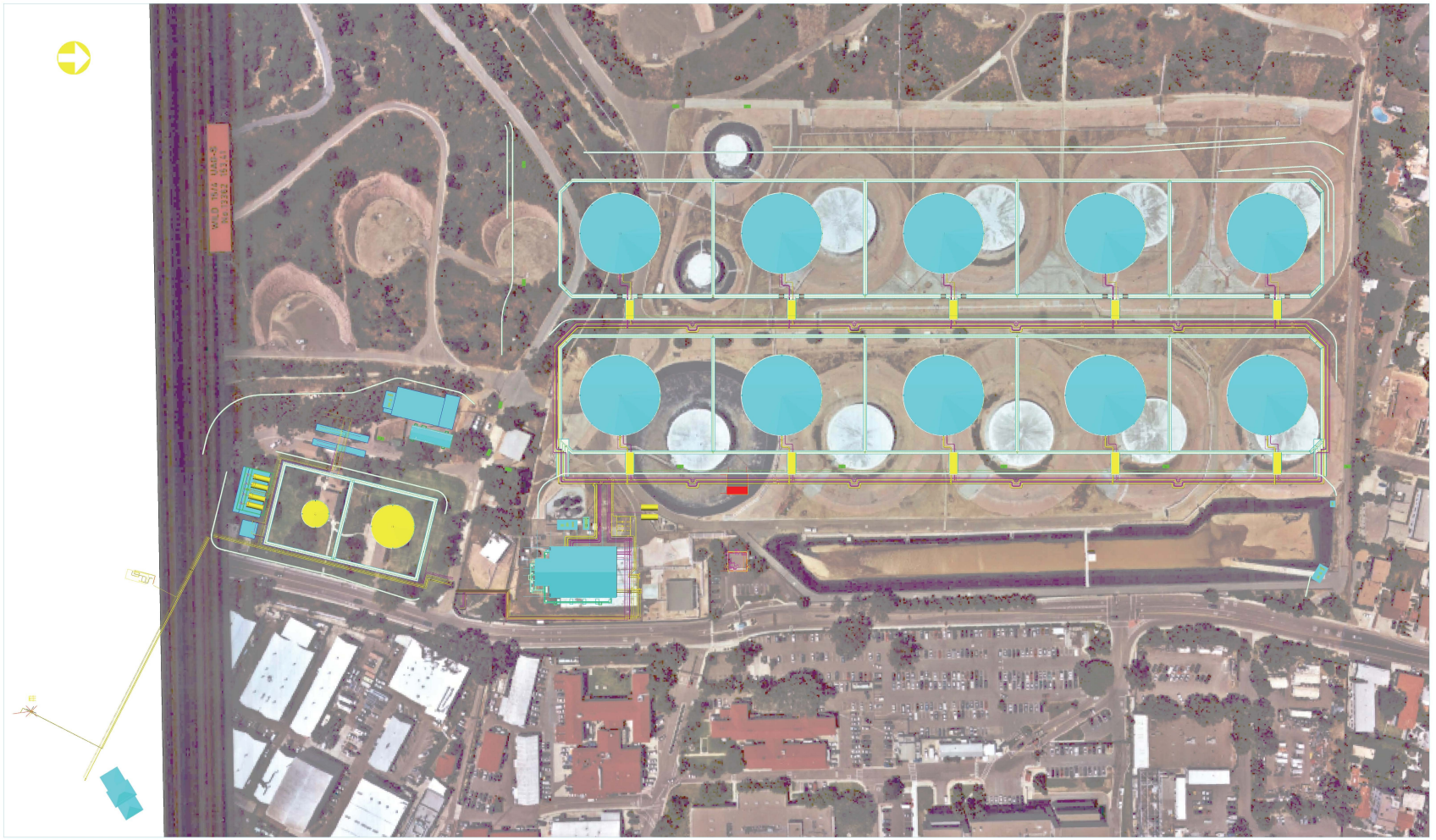
# Off-Property Sentinel Wells



# Actions Going Forward

- Continue monitoring to demonstrate no effect on the Bay or Adjacent Property to the base
  - All actions in full coordination with Cal State RWQCB
- Increase tank and pipeline monitoring and testing programs
  - All above ground tanks monitored semi-annually until replaced
  - Underground pipelines monitored continuously and tested annually
- Maintain groundwater depressions to prevent further migration
- Full risk assessment of all data for any Health Hazards
  - Independent review by the Cal State RWQCB
- Engineering Study for more rapid product recovery
- Support MILCON P-401 as the final solution
  - Currently conducting NEPA actions and 90% planning
- Proactive community and media outreach

# P-401 Tank Replacement Project



| | | | | | |
|---|---|---|---|---|---|
| FISC POINT LOMA<br>SAN DIEGO, CALIFORNIA<br>REPLACE FUEL STORAGE TANKS (P-401) | NAVFAC | DEPARTMENT OF THE NAVY<br>NAVAL FACILITIES ENGINEERING COMMAND<br>SOUTHWEST DIVISION | BURNS & MCDONNELL<br>940 WARD PARKWAY<br>KANSAS CITY, MO 64114 | Burns & McDonnell SINCE 1898 | PROPOSED LAYOUT<br><br>JUNE 23, 2006 |

# Questions?
# www.cnrsw.navy.mil

DEFENSE ENERGY SUPPORT CENTER

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